AUG 1 7 2005 NO Code: AP.PRE.REQ
Under the Paperwork Reduction Act of 19

PTO/SB/33 (07-05)
Approved for use through xx/xx/200x. OMB 0651-00xx

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Inder the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Onder the Paperwork Reduction Act or 1995, no persons are required to respon	na to a someoner.	Docket Number (Or		
PRE-APPEAL BRIEF REQUEST FOR REVIEW				
		SNY-P3965		
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail	Application Number		Filed	
in an envelope addressed to "Mail Stop AF, Commissioner for	09/686,120		10/11/2000	
Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]				
on _8/19/2003	First Named Inventor			
Signature RAM	Tsang, et al.			
	Art Unit	Exa	aminer	
Typed or frinted Jerry A. Miller		2611	Saltarelli	
Traine	<u> </u>			
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed				
with this request.				
·				
This request is being filed with a notice of appeal.				
The review is requested for the reason(s) stated on the attached sheet(s).				
Note: No more than five (5) pages may be provided.				
		•		
	•		_	
I am the				
applicant/inventor.		ar (N. A)		
application vertico.	171	Sig	nature	
assignee of record of the entire interest.  See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.		Jerry A. Mille	r .	
(Form PTO/SB/96)	V	Typed or	printed name	
attorney or agent of record.		919-816-9981		
Registration number		Telepho	ne number	
attorney or agent acting under 37 CFR 1.34.				
		8/15/200	)5	
Registration number if acting under 37 CFR 1.34	_	[	Date ·	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.				
Submit multiple forms if more than one signature is required, see below*.				
X trade f				
*Total of forms are submitted.				

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.





## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Patent Application of:

Inventor(s)

Tsang, et al

Filed Serial No. 10/11/2000

Confirmation No.

09/686,120

Group Art Unit

4933

2611

Examiner

Saltarelli, Dominic D.

Docket Number

SNY-P3965

Title

IP Address Discovery for Cable Modem in Set Top Box

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

## **CERTIFICATE OF MAILING / FAX TRANSMISSION**

I hereby certify that this correspondence is, on the date shown below, being:

[X] deposited with the U.S. Postal Service as first class mail with sufficient postage in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA

[ ] transmitted by facsimile to the U.S. Patent and Trademark Office.

Signature:

## PRE-APPEAL BRIEF REMARKS

Sir:

The current Final Office Action asserts in the paragraph spanning page 3 and 4 that "(when both a client device and an attached cable modem are initialized, external modems periodically transmit a 'heartbeat' signal over the interconnection which constantly updates the client device regarding the state of the modem, wherein said 'heartbeat' signal includes the most recent IP address assigned to the modem by the DHCP server 110)".

This rejection is fatally flawed for at least the following reasons:

- The Office Action never cites a passage of Lim or any other reference of record to support this assertion, and the undersigned can find no such teaching.
- The Lim reference never even uses the word "heartbeat".
- The only relevance of Lim seems to be that Lim shows a cable modem connected to a PC, and discusses a DHCP assigning IP addresses. The reference is totally silent on how a PC learns the IP address of a cable modem used for communication between the PC and the cable modem. While Lim discusses use of a DHCP request to obtain an IP address from the DHCP server, there is no relevant teaching whatsoever of the subject matter of Applicant's claims.

The Office Action further asserts (second paragraph of item #4) that the "main circuit board determines IP address of the modem (also an inherent feature...)". Applicants submit that such is not inherent and even if it were inherent, there is no teaching in Lim adequate to meet most of the other claim limitations.

MPEP 1112-IV states that an Examiner must provide a rationale or evidence showing inherency. No such rationale or evidence has been presented; we are left with a bare allegation. Applicants submit that the allegation is false. Evidence submitted herewith from "Robin Walker's Cable Modem Pages" indicates that in most circumstances, the main circuit board would have no reason to "determine" the IP address of a modem, since the standard address of 192.168.100.1 could be used to communicate with the modem. Other mechanisms are discussed for determination of a cable modem IP address in other circumstances – none of which meet the claim features. Thus, the broad assertion made in the Office Action is not supported by the evidence and an unsupported rejection based on inherency cannot be upheld.

Consider the following analysis of claim 1, by way of example and not limitation (bearing in mind that each and every word of the claims must be considered in making a determination regarding patentability). This analysis is restricted to claim features asserted to be shown in Lim, since the secondary reference is only submitted to show a cable modem in a set top box:

<u> </u>	CLAIM 1	REMARKS
1	In a Set-Top Box configured with a modem and a Main Circuit Board where the Main Circuit Board is connected to the modem via an interconnection, a method of enabling the Main Circuit Board to determine the IP address of the modem, comprising:	Lim is silent about how the modem obtains the IP address of the cable modem.
2	at the modem: periodically broadcasting a Discovery Packet over the interconnection from the modem to the Main Circuit Board, by addressing the Discovery Packet to a broadcast address that can be received by the Main Circuit Board, the Discovery Packet comprising at least the IP address of the modem in order to permit the Main Circuit Board to learn the modem's IP address;	No disclosure of a discovery packet in Lim.  No disclosure of a broadcast address in Lim.  No disclosure of a broadcast discovery packet containing an IP address.  No disclosure of a discovery packet being addressed to a broadcast address of the main circuit board.  No disclosure of periodic broadcast of such discovery packet.
3	And at the Main Circuit Board: monitoring the interconnection for receipt of broadcast Discovery Packets addressed to the broadcast address;	No disclosure in Lim of monitoring an interconnection for a broadcast Discovery packet
4	receiving the broadcast Discovery Packet addressed to the broadcast address at the Main Circuit Board from the modem over the interconnection; and	No disclosure of receiving a discovery packet in Lim.  No disclosure of a broadcast address at the main circuit board in Lim.  No disclosure of a broadcast discovery packet being addressed to a broadcast address of the main circuit board.
5	Ascertaining the IP address of the modem from the broadcast Discovery Packet.	No disclosure of any mechanism for a main circuit board to ascertain an IP address in Lim.

Similar arguments can be made for each of the other claims.

In view of the above, it is clear that there currently exists no sustainable rejection of record. Lim fails to teach practically every feature of claim 1. Applicants accordingly request that the present application be allowed or passed to the Board of Appeals and Interferences for final resolution.

## Further Remarks:

While the above is fully adequate to overcome the current final rejection, Applicants wish to address issues raised during a recent interview. Examiner Tran asserts that all claims are anticipated by a Microsoft reference (which is not been cited and made of record) and therefor since Lim uses addresses obtained from a DHCP server, the claim features are anticipated. If understood, the rationale Mr. Tran apparently used is that on setup or initialization, the cable modem receives an IP address from the DHCP server. If a new IP address is assigned from the DHCP server, the cable modem becomes non-responsive and the user reboots the system (resulting in a new initialization) in order to acquire the new IP address. Applicant has no idea why Mr. Tran considers this relevant to the claims which call out a specific technique for the cable modem to periodically update the main circuit board in the event a new IP address is assigned.

Assuming arguendo that Mr. Tran's assertion is correct (not an admission), he still fails to address any of Applicants' claim limitations. Moreover, he seems to contradict the assertion of the present Office Action that alleges that a "heartbeat" signal is periodically transmitted by the cable modem to keep the main circuit board "constantly updated" with the latest assigned IP address. If this were the case, presumably, the period of transmission would be short enough to eliminate failure of the cable modem and the need for the rebooting, which Mr. Tran asserts would cause a re-initialization.

Applicants reiterate that, while Mr. Tran's oral arguments are gratuitously addressed herein even though they have not been formally presented, the Examiner is required under MPEP 2142 to establish a *prima facie* case of unpatentability in which each and every word of the claims is considered. Unsupported assertions of inherency and rejections (or sustaining of rejections) without benefit of citing prior art to support the position is improper, counterproductive and unnecessarily costly to the undersigned's client (and the USPTO's client). Such assertions have resulted in the filing of the present appeal.

All claims are believed clearly allowable and such allowance is respectfully requested at an early date.

Respectfully submitted,

Registration No. 30,779

Dated: 8/15/2005

Please Send Correspondence to: Jerry A. Miller Miller Patent Services 2500 Dockery Lane Raleigh, NC 27606

Phone: (919) 816-9981 Fax: (919) 816-9982

**Customer Number 24337**